

NARRATIVE

TO: Cynthia Dorrough
FROM: Jada Levers
DATE: November 15, 2022

Facility Name: **SA Recycling – East Point**
AIRS No.: 04-13-121-00312
Location: East Point, GA (Fulton County)
Application #: 28583
Date of Application: September 13, 2022

Background Information

SA Recycling, previously known as “Newell Recycling of Atlanta, LLC”, operates an automobile shredder system located at 1359 Central Avenue, East Point, Georgia 30344. Automobiles are first drained of all fluids and placed into the automobile shredder. Materials exit the shredder on a conveyor belt, where they are separated into piles based on size, weight, and material content before they are processed. SA Recycling is within the limits of Fulton County, which is considered attainment area for all criteria pollutants including Ozone as EPA regulated on October 17, 2022. The facility was recently permitted under Permit No. 5093-121-0312-S-01-1, effective June 12, 2015, as a synthetic minor source with regard to Title V Regulations.

On September 30, 2019, an NPR (No Permit Required) Letter was issued for the removal of Rotary Dryer (Source Code: RD01) and associated air pollution control device (Source Code: BH01). In an email dated February 16, 2023 from Joel Moscosso at the facility, EPD became aware that the spray chamber scrubber (Source Code: SCR1) is no longer used as a control device on the automobile shredder. This device used to be operated by the previous owners of the East Point facility. However, SA Recycling no longer has this device installed and it was excluded from Application No. 28583.

SA Recycling is currently classified as a PSD minor source because potential emissions of regulated pollutants are below the 250 tpy threshold and it is not one of the 28 named source categories under PSD. Based on uncontrolled emissions, the facility has the potential to be classified as a major source for PM; however, the facility has proposed to limit the annual shredding output of the automobile shredder to less than 369,600 tons per year to avoid classification as a major source under PSD.

Purpose of Application

Application No. 28583 was dated September 13, 2022 and received September 19, 2022, requesting to limit the annual shredder output to 369,600 tpy and thus limit VOC emissions to 22.16 tpy. Public advisory was not needed since there will not be an increase in emissions past exemption thresholds.

Updated Equipment List

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
SHR1	Automobile Shredder	1976	N/A	N/A

Emissions Summary

The following emissions table accommodates the most recent source testing performed for the facility on June 16-18, 2021. The results of the source test show the VOC emission rate exceeded 25 tpy, so the facility developed a new VOC emission factor: 0.13 lb/ton per long ton of shredder output or 0.12 lb/ton per short ton of shredder output. The facility proposed an annual shredder limit to limit VOC output to 22.16 tpy. The emission values are based on an annual shredding output limit of 369,600 tpy for 12-consecutive months for the automobile shredder. "Before" values are taken from Permit No. 5093-089-0005-V-04-1 and "After" values are taken from Attachments A and D of Application No. 28583.

Facility-Wide Emissions
(in tons per year)

Pollutant	Potential Emissions			Actual Emissions		
	Before Mod.	After Mod.	Emissions Change	Before Mod.	After Mod.	Emissions Change
PM/PM ₁₀ /PM _{2.5}	8.76	3.81	-4.95	7.97	0.96	-7.01
NO _x	10.74	0	-10.74	6.13	0	-6.130
SO ₂	0.06	0	-.06	0.04	0	-0.04
CO	9.02	0	-9.02	5.15	0	-5.15
VOC	0.59	88.2	+87.61	0.34	22.16	+21.82
Max. Individual HAP	1.93E-01	1.34	+1.14	0.13	0.34	+0.21
Total HAP	1.22	6.87	+5.65	0.69	1.73	+1.04
Total GHG (if applicable)	3.48E03	0	-3.48E03	1.99E03	0	-1.99E03

Regulatory Applicability**Georgia Rule 391-3-1-.02(2)(e) – Particulate Emissions from Manufacturing Processes**

The facility is subject to rule (e), which states that the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source involved in the manufacturing process, particulate matter in total quantities equal to or exceeding the following rates:

$$E = 4.1 P^{0.67}; \text{ for process input weight rate up to and including 30 tons per hour;}$$

Where,

E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

Based on calculations submitted in the application, the potential controlled emissions will not exceed the allowable emissions calculated from these equations. The automobile shredder is subject to this regulation.

Georgia Rule 391-3-1-.02(2)(n) – Fugitive Dust

The facility is subject to rule (n) which states that all persons responsible for any operation, process, handling, transportation or storage facility which may result in fugitive dust shall take all reasonable precautions to prevent such dust from becoming airborne. The percent opacity from any fugitive dust source shall not exceed 20%.

Georgia Rule 391-3-1-.02(2)(tt)- VOC Emission from Major Sources

This rule prohibits the emission of VOC from any source to exceed 25 tons per year from sources located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties unless such source has been approved by the Director as meeting the appropriate requirement for all reasonably available control technology (RACT) in controlling the emissions of VOC. Through source testing on the automobile shredder, potential VOC emissions of 88.2 tpy exceeds the 25 tpy threshold for the facility; however, the facility has proposed a VOC limit of 22.16 tpy. Therefore the facility will not be subject to Georgia Rule 391-3-1-.02(2)(tt) for VOC RACT.

Georgia Rule 391-3-1-.02(2)(yy)- Emission of Nitrogen Oxides from Major Sources

The facility is subject to rule (yy) which prohibits the emission of nitrogen oxides from any source to exceed 25 tons per year from sources located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties unless such source has been approved by the Director as meeting the appropriate requirement for all reasonably available control technology (RACT) in controlling the emissions of nitrogen dioxides. Potential NOx emissions do not result in a major source status for the facility; therefore the facility is not subject to Georgia Rule 391-3-1-.02(2)(yy).

Permit Conditions

Permit Condition 2.1 limits PM emissions from any source to the allowable rate calculated from the equations listed in Georgia Rule 391-3-1-.02(2)(e).

Permit Condition 2.2 has been modified to replace Georgia Rule (b) with more stringent requirements of Georgia Rule (n), which limits visible emissions from all process equipment to less than 20 percent opacity.

Old Permit Condition 2.3 was removed following the decommission of RD01 and BH01. Old Permit Condition 2.4 was removed following clarification that SCR1 is no longer installed on the automobile shredder.

Old Permit Condition 2.5 was modified and becomes New Condition 2.3, limiting annual shredding output to 369,600 tons per year instead of limiting the automobile shredder to an operating limit of 2,500 hours per year. A limit of 369,600 tons per year of shredder output from the automobile translates to 2,200 hours of operation, therefore the new limit based on shredder output is more conservative than the previous hours of operation limit.

Old Conditions 2.6 and 2.7 have been removed from the permit following the decommission of RD01 and BH01.

Permit Condition 3.1 has been modified to reflect Georgia Rule (n) verbiage and requires the Permittee to take all reasonable precautions with any operation, process, handling, transportation or storage facilities to prevent fugitive emissions or air contaminants.

Permit Condition 6.1 provides guidelines for performance and compliance testing.

Permit Condition 7.1 requires the Permittee to maintain daily shredding output logs for the automobile shredder for inspection purposes.

Permit Condition 7.2 requires the Permittee to maintain monthly shredding output records using the daily logs required by Permit Condition 7.1 for the automobile shredder for inspection purposes.

Permit Condition 7.3 requires the Permittee to use the monthly shredding output records for the automobile shredder required by Permit Condition 7.2 to calculate the 12-consecutive month shredding output of the shredder. In the event the monthly operation of the shredder exceeds 1/12th of its rolling annual limit during any calendar month, the Permittee is required to notify the Division in writing.

Permit Condition 7.4 requires the Permittee to report any exceedances in Permit Condition 2.3 within 15 days of occurrence.

Permit Condition 8.1 gives the Division authority to amend this Permit at any reasonable time.

Permit Condition 8.2 revokes all previous permits.

Permit Condition 8.3 requires the facility to pay permit fees.

Toxic Impact Assessment

A toxic impact assessment was not performed.

Summary & Recommendations

Based on the above considerations, I recommend Permit No. 5093-121-0312-S-02-0 be issued to SA Recycling located at 1359 Central Avenue, East Point, Georgia 30344. The facility will maintain its synthetic minor source status and will continue compliance responsibility with and submitting reports to the Mountain District (Atlanta) Office.